



**DON W.  
WEBER**

***Patent Attorney***

**20-A Edwardsville Prof. Park  
Edwardsville, Illinois 62025**

**618-655-0755  
(Phone and Fax)**

**6 January 2004**

**Application # 10/672,526  
Filed 29 September 2003  
Applicant James D. Davis**

**Dear Sir:**

**I am the attorney of Record for the above applicant. Please find enclosed a corrected copy of the original specification, with spacing of 1 ½ lines per page.**

**Sincerely,**

**Don Weber  
#32,321**

**Authorized to Practice before the United States Patent Office**



## **DEER STAND AND DEER CARRIER RACK FOR AN ATV**

### **BACKGROUND OF THE INVENTION**

5

**This invention relates generally to the field of hunting. More particularly, a deer stand and deer carrier rack is presented which is readily attachable to an ATV vehicle.**

10

15

**In the field of hunting, different types of devices have been utilized to transport the game once the game has been killed. These transport devices include anything from an Indian travois, to a wheelbarrow or a simple pole carried by two hunters. With the recent introduction of ATV four-wheel motorized vehicles for use in hunting, certain innovations adaptable to be attached to an ATV have been described in the literature. Some of these devices utilize rectangular frames that are mounted to the ATV racks. These frames are then used to transport the fallen deer, deer stands, guns, bows and arrows, or other hunting equipment.**

20

**Since nearly all ATVs have a front and rear rack, it would be an improvement over the prior art to provide a rack for carrying a deer stand which is attachable to the ATV carrier frame. It is an object of this invention to provide a rack that may be attached to an ATV for carrying a deer stand.**

25

**Since ATV racks are not standardized, it would also be an improvement if the deer stand carrier were adaptable to the different types of ATV racks in**

common use. It is another object of this invention to provide a deer stand rack that is adjustable such that it may be attached to many different types of ATV vehicles.

5        One difficult problem in the hunting field is the transportation of the game, particularly a heavy deer that may weigh in excess of 200 pounds. While other deer transporting racks have been disclosed, the problem with loading and securing a heavy deer onto the deer carrier rack has not yet been effectively addressed. It is a still further object of this invention to provide a  
10        deer carrier which is readily attachable to an ATV and which is hinged such that the deer may be more easily loaded.

Other and further objects of this invention will become apparent upon reading the following description of the invention.

#### **BRIEF DESCRIPTION OF THE DEVICE**

20        A pair of front and rear racks may be readily and adjustably attached to the front and rear carriers of a standard ATV vehicle. The rear rack has an essentially rectangular frame with rearwardly protruding oblique hangers and front "L" shaped hangers. The rectangular frame is adjustable such that it may be universally attached to the rear carrier of nearly all ATV vehicles.  
25        The oblique rearwardly facing carrier allows a hunter to load and secure a deer stand to the ATV vehicle for easy transportation. The front, "L" shaped

carriers can conveniently carry a hunter's rifle, a bow and arrow, camping equipment, or other equipment commonly used hunting.

Readily and adjustably attached to the front carrier of the ATV is a deer carrier rack. The deer carrier rack also has a rectangular attaching frame that is adjustably secured to the front carrier of an ATV. The deer carrier also has a lower hinged deer support frame with a dogleg portion that may be deployed to the front of the ATV, nearly parallel to the ground. A pair of left and right dogleg shaped rods is rotatably attached to the frame and form the deer-carrying portion of this carrier.

The outer end of the dogleg portion has an "L" shaped ground brace that keeps the dogleg frames off of the ground.

Also attached to the left and right dogleg rods respectively are left and right wings, which are utilized to support the deer. Once the deer is loaded and secured to the deer-carrying portion of the rack, the dogleg rack may then be lifted and strapped to the front of the ATV for transportation of the deer.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

Figure 1 is a perspective view of the deer stand rack.

Figure 2 is perspective view of the deer stand rack attached to the rear of the ATV vehicle.

**Figure 3 is a side view of the deer stand rack attached to an ATV vehicle.**

**Figure 4 is a partial side view of the deer stand and ATV vehicle.**

**Figure 5 is a perspective view of the deer carrier rack.**

**Figure 6 is a perspective view of the deer carrier rack attached to the front of an ATV vehicle.**

**Figure 7 is a front view of the deer carrier rack attached to an ATV vehicle.**

**Figure 8 is a perspective view of the deer carrier rack showing a deer as it is secured in the loaded condition.**

**Figure 9 is a partial perspective view of the deer carrier rack shown in its empty but upright position.**

### **DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT**

**A deer stand rack 1, as best shown in Figure 1, has a rectangular attaching frame with vertical legs 2 and horizontal legs 3. The rectangular frame also has horizontal attaching bars 4, as best shown in Figure 2.**

In order to enable the hunter to transport a deer stand, oblique stand holder rails 5 are attached to the rear portion of the rectangular frame and face rearwardly in at an upper oblique angle as shown. Attached to the inward portion of the rectangular frame is a pair of “L” shaped rack holders 6. The rack holders face forwardly.

The rear deer stand rack 1 is attached to an ATV vehicle by means of “U” clamps 7. These “U” clamps 7 secure the adjustable attaching frame bars 4 to the ATV rack 8, as shown in Figures 1 and 2.

Turning now to Figure 3, an ATV vehicle is shown in dotted lines 9. The rectangular attaching frame is secured to the ATV vehicle as shown. A deer-hunting stand 10, which is foldable for transportation, is readily secured to the deer stand rack by sliding its frame over the oblique stand holder rails 5. Available to transport other hunting gear are the “L” shaped rack holders 6.

Figure 4 shows the deer stand rack attached to the rear rack of an ATV vehicle.

Designed to be attached to the front of the ATV is a deer carrier rack 11. This deer carrier rack is designed to transport a deer once it has been taken. The deer carrier rack 11 has a rectangular attaching frame with vertical legs 12 and horizontal legs 13. Inside the upper and lower horizontal legs are horizontal attaching bars 14. These horizontal attaching bars 14 may be moved up and down within the rectangular frame and may be tightened

using the screws shown in Figure 5. The attaching bars are movable and securable in order to adapt the deer carrier rack to the different types of ATV carriers currently in use.

5       The lower portion of the deer carrier rack includes a pair of hinged, left and right dogleg rods 15. These dogleg rods have an oblique angle to them as shown in order to allow for the essentially horizontal deployment of the lower, hinged deer support frame when it is deployed to load a deer. The dogleg rods 15 are rotatably attached to a bottom axel 16 of the frame as best shown  
10 in Figure 5. Each dogleg rod has a hinge 17 that is rotatably attached to the bottom axel 16.

      The deer carrier also has left and right irregularly shaped wing pieces 18 that are attached to the left and right dogleg rods 15, respectively. In order  
15 to stabilize the deer-carrying portion of the rack, dogleg cross bar braces 19 may be secured inside the pair of dogleg rods 15.

      Turning now to Figure 6, the deer carrier rack is shown in the deployed position. The dogleg rods 15 are essentially parallel to the ground, but are  
20 suspended slightly from the ground by the carrier ground brace 20. The ground brace is located at the outer end of the dogleg rods. This carrier ground brace 20 is generally “L” shaped as best shown in Figure 6.

      Eyelets 21 are also attached at the end of the dogleg rods and to the  
25 wing pieces as shown. These eyelets are used to attach the deer to the rack in its deployed position and to secure the deer and the rack itself to the ATV in an essentially upright position for transportation.

The deer carrier rack 11 is readily and adjustably attached to the front rack 22 of an ATV as shown in the Figure 7. "U" clamps 7 secure the attaching bars 14 to the ATV front rack 22.

5

As best shown in Figure 8, the deer is transported in an essentially vertical position. The deer 25 is first loaded and then secured and strapped to the dogleg and wing pieces by deer straps 24. The dogleg rods are then rotated to the essentially vertical position shown in Figure 8. A strap 26 then secures the lower deer support frame in the essentially vertical position by attaching the hinged support frame to a suitable rail 23 located near the front handle bar section of the ATV.

10

When not carrying a deer, the lower deer support frame deer is deployed in the essentially vertical position as shown in Figure 9. The strap 26 secures the dogleg rods and wing pieces. The lower deer-carrying portion of the deer rack is transported up and off of the ground as shown.

15

Generally, the deer-stand rack and deer-carrying rack frames may be made of tubular aluminum, steel, or other strong type of framing material. While the preferred embodiment includes the use of tubular steel, steel having a square or rectangular cross section or other configuration may also be utilized in constructing these racks while still keeping within the spirit and disclosure of the invention.

20

Although the dogleg and winged shape for the deer-carrying portion of the rack is described herein, it is to be appreciated that any general shape for

25



the rack can be utilized. The embodiment shown and described for the deer carrier rack is meant as a means of illustration only and not as a limitation. Minor variations of the exact design or angles of the rack are still within the keeping of this disclosure. While the deer-stand holder rails are shown as  
5 having an oblique angle with respect to the frame, they may have a lesser degree or greater degree of angle, or maybe perpendicular to the frame while still keeping within the spirit and disclosure of this invention.

.10